IN THE CLAIMS

Please cancel claims 24-32 without prejudice.

Please amend the claims as follows:

1. (currently amended) An integrated circuit for providing a switchover from a primary power source to a secondary power source, the integrated circuit comprising:

a power source switchover circuit for ~~detecting the~~ receiving a supply level of the primary power source and ~~a voltage threshold~~ generating (i) a reference signal based on the supply level of the primary power source and (ii) an indication signal representative of the supply level of the primary power source, the power source switchover circuit having a plurality of input terminals, a first input terminal ~~selectively~~ electrically coupled to the primary power source and a second input terminal ~~selectively~~ electrically coupled to ~~the secondary power source~~ a substrate of the integrated circuit, the power source switchover circuit further having a plurality of output terminals;

a comparator, electrically coupled to the power source switchover circuit, for indicating that the ~~supply level of the primary power source~~ indication signal has decreased below the ~~voltage threshold~~ reference signal, the comparator having a first and a second input terminal connected to a first and a second output terminal of the power source switchover circuit, respectively, the comparator further having an output terminal;

a forced power source switchover circuit for detecting that the supply level ~~being received from~~ of the primary power source ~~by the integrated circuit~~ drops below a predefined threshold level, the forced power source switchover circuit having at least one input terminal and at least one output terminal, one input terminal being electrically connected to the primary power source; and

a switchover circuit for initiating a switchover operation based upon the indication from the comparator or upon an indication that the forced power source switchover circuit detects that the supply level ~~being received from~~ of the primary power ~~source by the integrated circuit~~ drops below the predefined threshold level, the switchover ~~logic~~ circuit having a first input terminal connected to the output terminal of the comparator and a second input terminal connected to one output terminal of the forced power source switchover circuit.

2. (currently amended) The integrated circuit according to claim 1, wherein the forced power source switchover circuit is reactive to the supply level of the primary power source transitioning from a steady-state supply level to below the predefined threshold level, the supply level of the primary power source transitioning faster than a predetermined negative rate of change.

3. (currently amended) The integrated circuit according to claim 2, wherein the negative rate of change of the supply level is approximately 150 microseconds from steady state to below the predefined threshold level.

4. (currently amended) The integrated circuit according to claim 1, further comprising circuitry connected to the power source switchover circuit for selectively adjusting the ~~indicating~~ indication signal produced by the comparator.

5. (currently amended) The integrated circuit according to claim 1, further comprising circuitry connected to the forced power source switchover circuit for selectively adjusting the ~~first~~ predefined threshold level.

6. (currently amended) The integrated circuit according to claim ~~1~~5, further comprising a plurality of input terminals for receiving input signals to configure the switchover ~~logic~~ circuit to selectively adjust the predefined threshold level.

7. (original) The integrated circuit according to claim 1, further comprising a delay circuit for providing a time duration for the substrate of the integrated circuit to settle from a first voltage potential to a second voltage potential upon the switchover from the secondary power source to the primary power source.

8. (currently amended) The integrated circuit according to claim 1, wherein the predefined threshold level ~~detected by~~ associated with the forced power source switchover circuit is below the crossing level of the supply level of the primary power source and the ~~voltage threshold~~ reference signal.

9. (currently amended) A method for performing a power source switchover from a primary power source to a secondary power source, the method comprising the steps of:

detecting that a supply level being received from the primary power source decreases below a predefined threshold level from a steady-state operating level, the supply level of the primary power source transitioning faster than a predetermined negative rate of change,

said detecting being based on (i) the supply level of the primary power source and (ii) a voltage level of a substrate of an integrated circuit;

asserting a signal indicating to switch from the primary power source to the secondary power source upon detecting that the supply level ~~being delivered from~~ of the primary power source has decreased below the predefined threshold level;

detecting the signal indicating to switch from the primary power source to the secondary power source; and

switching from the primary power source to the secondary power source based upon detecting the signal indicating ~~to force a power source switchover~~ to switch from the primary power source to the secondary power source.

10. (original) The method according to claim 9, wherein the primary power source is an external power source.

11. (original) The method according to claim 9, wherein the secondary power source is a battery.

12. (original) The method according to claim 9, wherein the predefined threshold level is below 2.5 volts.

13. (currently amended) The method according to claim 9, wherein the negative rate of change of the supply level is approximately 150 microseconds from steady state to below the predefined threshold level.

14. (currently amended) The method according to claim 9, further comprising the steps of:

~~detecting~~ receiving the supply level being delivered from the primary power source;

~~detecting~~ receiving the a voltage potential of ~~a~~ the substrate of an integrated circuit;

generating a reference signal and an indication signal based on the received supply level and voltage potential; and

producing a compare signal indicative of the relative values between the ~~detected supply level being delivered from the primary power source and the voltage potential of the substrate~~ reference signal and indication signal.

15. (original) The method according to claim 14, further comprising the steps of

receiving the compare signal and the signal indicating to force the power source switchover;

determining an occurrence of a transition of either the compare signal or the signal indicating to force the power source switchover; and

initiating a switch from the primary power source to the secondary power source upon the determination of the occurrence of a transition of the compare signal or the signal indicating to force the power source switchover.

16. (currently amended) A circuit comprising:

a first detection circuit for detecting a supply level ~~decrease~~ of a ~~power level from~~ a primary power source, ~~the supply level transitioning~~ decreasing from a steady-state supply level to a predefined threshold level faster than a predetermined negative rate of change, the first detection circuit basing the detection on the supply level and a voltage level of a substrate of the circuit, and further generating at least one signal in response to the supply level decreasing to the predefined threshold level; and

a first switching circuit for switching from the primary power source to a secondary power source in response to the at least one signal.

17. (currently amended) The circuit according to claim 16, wherein the primary power source is an external power source relative to the circuit.

18. (original) The circuit according to claim 16, wherein the secondary power source is a battery.

19. (currently amended) The circuit according to claim 16, wherein the predetermined negative rate of change of the supply level is approximately 150 microsecconds from steady state to below the predefined threshold level.

20. (original) The circuit according to claim 16, further comprising circuitry for adjusting a response time for the first detection circuit.

21. (currently amended) The circuit according to claim 16, further comprising:

a second detection circuit for detecting a voltage threshold of the ~~power source switchover~~ first detection circuit and the supply level being received from the primary power source, the second detection circuit producing a plurality of signals based upon the detecting;

a comparator in communication with the second detection circuit and operable to compare at least two of the signals produced by the second detection circuit and produce a comparison signal; and

~~a second~~ wherein the first switching circuit ~~for switching~~ is operable to switch from the primary power source to the secondary power source in response to the ~~plurality of signals based upon the detecting~~ comparison signal.

22. (original) The circuit according to claim 21, further comprising circuitry for selectively responding to the first and the second detection circuits.

23. (currently amended) The circuit according to claim 21, further comprising an input terminal coupled to a circuit operable to selectively disable a switchover from the primary to the secondary power source.

24 - 32. (cancelled)

Please add the following new claims:

-- 33. (New) A method for preventing loss of data from a volatile memory device, the method comprising:

establishing a first voltage level trip point by which to switch from a primary power source to a secondary power source;

establishing a second voltage level trip point, below the first voltage level trip point, by which to switch from the primary power source to the secondary power source; and

in response to a supply level of the primary power source dropping below the first and second voltage level trip points, switching from the primary power source to the secondary power source to maintain power to the volatile memory device.

34. (New) The method according to claim 33, wherein the first voltage level trip point is more stable over temperature than the second voltage level trip point.

35. (New) The method according to claim 33, wherein the establishing of the first voltage level trip point includes disabling an electrical component.

36. (New) The method according to claim 33, wherein the switching from the primary power source to the secondary power source occurs without an indication that the supply level has dropped below the first voltage level trip point.

37. (New) A system including electronic circuitry for preventing loss of data from a volatile memory device within the system, the system comprising:

a first electronic circuit having a first voltage level trip point operable to switch from a primary power source to a secondary power source;

a second electronic circuit having a second voltage level trip point, below the first voltage level trip point, operable to switch from the primary power source to the secondary power source; and

a third electronic circuit operable to switch the power being delivered to the system from the primary power source to the secondary power source in response to a supply level of the primary power source dropping below the first and second voltage level trip points.

38. (New) The system according to claim 37, wherein the first electronic circuit is more stable over temperature than the second electronic circuit.

39. (New) The system according to claim 37, further comprising at least one electrical component, the first voltage level trip point of the first electronic circuit being established by configuring at least one of the at least one electrical component to be in a predetermined electrical state.

40. (New) The system according to claim 37, wherein the third electronic circuit is operable to switch from the primary power source to the secondary power source without an indication from the first electronic circuit that the supply level has dropped below the first voltage level trip point.

41. (New) The system according to claim 37, wherein the second electronic circuit is operable to detect the transitioning of the supply level of the primary power source at a faster rate that a rate of transition than the first electronic circuit is capable of detecting.